

# United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/469,597	12/22/1999	JAMES E. ANGELO	S01.12-0543	5141
7590 01/12/2004			EXAMINER	
WESTMAN CHAMPLIN & KELLY PA			KAPADIA, VARSHA A	
SUITE 1600 INTERNATIONAL CENTRE 900 SECOND AVENUE SOUTH MINNEAPOLIS, MN 554023319			ART UNIT	PAPER NUMBER
			2651	
			DATE MAILED: 01/12/2004	10

Please find below and/or attached an Office communication concerning this application or proceeding.

•		Application No.	Applicant(s)			
		09/469,597	ANGELO ET AL.			
	Office Action Summary	Examiner	Art Unit			
		Varsha A Kapadia	2651			
	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).  Status						
1)⊠	Responsive to communication(s) filed on 22 L	December 2003.				
2a)⊠	This action is <b>FINAL</b> . 2b) ☐ This	action is non-final.				
3)	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
5)⊠ 6)⊠ 7)⊠	4) ☐ Claim(s) 1-26 is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.  5) ☐ Claim(s) 1-22 is/are allowed.  6) ☐ Claim(s) 23-25 is/are rejected.  7) ☐ Claim(s) 26 is/are objected to.  8) ☐ Claim(s) are subject to restriction and/or election requirement.					
Applicati	ion Papers					
9) The specification is objected to by the Examiner.  10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.  Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. §§ 119 and 120						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> <li>13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet.</li> <li>37 CFR 1.78.</li> <li>a) The translation of the foreign language provisional application has been received.</li> <li>14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.</li> </ul>						
Attachment(s)						
2) 🔲 Notic	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Informal Pa	PTO-413) Paper No(s) atent Application (PTO-152)			

Art Unit: 2651

This office action is responsive to the amendment filed on December 22, 2003.

Rejection Under 35 U.S.C. 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 23-25 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 23 as amended now recites "a detector coupled to the actuator and configured to receive a signal from the actuator...". However, the specification as originally filed fails to disclose that the detector receives any signals from the actuator (fig.1 element 56). According to specification a transducer detects signal proportional to vibration of the movable head/suspension assembly. Appropriate corrections are required.

#### Rejection Under 35 U.S.C. 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002

Art Unit: 2651

do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 23 and 25 are rejected under 35 U.S.C. 102(e) as being anticipated by Evans et al. (5,862,015).

With regards to claim 23, Evans et al discloses an assembly comprising movable suspension assembly (see actuator arm/load beam elements 8 and 12 in fig.1 and disclosure thereof); an actuator coupled to the movable suspension assembly (see VCM/actuator on col.1 lines 40-45, col.2 lines 30-50, and figs 1, 3 and 8-9); a detector (see figs. 1, 3, 8-10, element 10 and disclosure thereof) coupled to the actuator and configured to receive signal from the actuator proportional to vibration of the movable suspension assembly.

With regards to claim 25 Evans et al further discloses a controller coupled to the actuator as claimed (see fig.3 element 19 and disclosure thereof).

#### Rejection Under 35 U.S.C. 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Evans et al in view of (Novotny (6,362,542).

Art Unit: 2651

With regards to claim 24, Evans et al discloses the invention as described above in this office action. Evans et al fails to specify that the actuator is one of a piezoelectric or electrostatic actuator.

Novotny, however discloses that the actuator (transducer) that is responsive to the head movement is a piezoelectric or electrostatic (see col.1 lines 35-37).

It would have been obvious to one of ordinary skill in the art at the time this invention was made to modify Evans et al with the above teachings from Novotny to provide an actuator that is piezoelectric or electrostatic since both are well known as an alternate material and hence to provide user with an alternate since no unexpected results are to occur.

## Allowable Subject Matter

Claims 1- 22 are allowed.

Claims 1- 22 are allowable over the prior art of record for the same reasons recited in the office action mailed on June 4, 2003.

Claim 26 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 26 is allowable over the prior art of record for the same reasons recited in the office action mailed on June 4, 2003.

### Response to Remarks

Applicants arguments filed on December 22, 2003 has been fully considered but are not persuasive because as disclosed by Evans et al. a load beam is part of an actuator arm which is connected to the actuator as claimed (see fig.1 and col.1 lines 40-45) and a detector (see fig.1

Art Unit: 2651

element 10 for example) is coupled to the load beam of an actuator arm, hence the detector is coupled to the actuator as claimed.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Varsha A Kapadia whose telephone number is (703) 305-4198. The examiner can normally be reached on Mon-Wed from 6:30 AM to 2:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David R. Hudspeth can be reached on (703) 308-4825. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

OC

DAVID HUDSPETH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2606